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FLSA: EXEMPT

SENIOR INFORMATION SERVICES ANALYST

DEFINITION

Under general supervision, assists in the planning, coordination, and implementation of the activities, operations and duties in support of the City's network and telecommunications; coordinates assigned activities with other departments and divisions, outside agencies, and the general public; provides staff assistance to the Information Services Division; and performs related work as required.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from assigned supervisory or management personnel. Exercises technical and functional direction over assigned staff.

CLASS CHARACTERISTICS

This is the advanced career-level class in the professional Information Services Analyst series responsible for designing, planning, implementing, and maintaining of the City's computer network infrastructure, including hardware, operating systems, and desktop/network applications. Responsibilities include maintaining network firewalls, routers, and switches, administering the e-mail system, and providing technical support to City staff. This class is distinguished from the Geographic Information Systems Coordinator by the higher level of responsibilities and broader scope of required knowledge of all hardware and software applications utilized by the city. This class is further distinguished from Information Services Manager by the latter's full management and supervisory responsibility in planning, organizing and directing the full scope of operations within the Division.

EXAMPLES OF ESSENTIAL JOB FUNCTIONS (Illustrative Only)

Management reserves the right to add, modify, change or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the essential functions of the job.

When performing Systems Analysis:

- Provides consulting advice and technical expertise to City departments regarding software needs analysis, evaluation of proposed solutions, systems integration, and solutions implementations; identifies and recommends appropriate standards or specialized hardware or software to meet the City's needs.
- Identifies opportunities for improving service delivery methods and procedures; reviews with appropriate management staff and implements improvements; works with City staff to maintain, revise, or improve the overall information technology operation.

When performing Systems Administration:

- Manages multiple servers, workstations, and terminals, ensuring proper integration of these components with existing system architecture.
- Conducts growth analysis and planning to prepare for and minimize costs of system expansion.
- Designs, develops and maintains websites and intranet sites.
- Develops and implements basic web applications and automated information technology.
- Works with vendor representatives to identify and correct causes of hardware and software malfunctions and to perform enhancements.
- Manages the allocation of resources including disks, terminals, and memory.
- Evaluates and analyzes the City's information systems needs and requirements; develops and recommends application and resource priorities; administers changes and adjustments to systems as needed.
- Monitors the performance of the system; tracks possible problem areas affecting response time and prepares recommendations for correction of problems and improvement in performance.
- Develops and implements backup policies and procedures; performs system backups.
- Develops, implements, maintains, and enforces policies and procedures for information technology operations.
- Maintains and compiles an electronic documentation library of user procedures manuals, technical references, training manuals, handbooks and guides; maintains logs, charts, diagrams and testing data for City's data, voice and video network.

When performing Database Administration:

- Designs, creates, manages, and maintains physical databases including database storage management, procedures and tools for access, database security, and monitoring and tuning the database to ensure ongoing operation and access.
- Installs, structures, tunes, and maintains database operating systems and software.
- Manages database organization and data storage.
- Monitors database system usage and performance.
- Troubleshoots and resolves database problems.
- Creates databases and/or migrates databases between machines.
- Supports client/server database access tools.
- Develops benchmarks for testing new software releases.
- Provides consultation to programmers on relational database design.
- Oversees vendor software fault resolution.

When performing Network Administration:

- Manages network architecture, including LAN, WAN, WLAN technologies including routers, switches, hubs, access points, Firewall, and DMZ.
- Designs, implements, and upgrades network architecture to accommodate growing communication requirements.
- Maintains and troubleshoots networks, systems, and applications to identify and correct malfunctions and other operational problems.

When performing Security Administration:

- Ensures safety and security of information system assets and protects systems from inappropriate access or destruction.
- Runs checks on data integrity; plans and executes disaster recovery plans.
- Develops system backup and archival methodology.
- Maintains data security and integrity by developing system access standards and procedures.

- Evaluates the adequacy of controls and security measures.
- Conducts virus avoidance procedures.
- Works with user to understand security needs and evaluates level of security required.

When performing Storage Administration:

- Designs system storage capacity to provide for efficient and timely response and operating time.
- Calculates data storage media and cost alternatives.
- Specifies sources and methods of data storage.
- Plans for efficient allocation of system storage capacity

When performing Help Desk:

- Provides on-call consulting advice and technical support to various users/client organizations regarding specific operational/applications issues.
- Responds to and resolves difficult inquiries and complaints.
- Analyzes, configures, plans, installs, maintains and troubleshoots personal computers, cabling, and peripherals.
- Conducts formal and informal training programs on the use and operation of various telecommunications and computer systems hardware and software.
- Advises and consults with users to develop required computer services; plans, coordinates, and schedules future computer applications, keeping all parties informed of plans, progress, and issues; develops and implements automated Information Technology, records, and reports in response to user needs; evaluates existing program performance and recommends modifications.
- Provides emergency response to reduce down time, correct errors, monitor vendor activity, off hours scheduled maintenance and system failures or on as needed basis.

When performing Telecommunications Administration:

- Performs diagnostic testing and analysis in troubleshooting and repair of voice network.
- Ensures that the operational, environmental, and application software are kept up with current release levels.
- Supports telecommunications, including telephone service at various sites, lease lines, landlines, and call and pager services.

When performing Information Services Operations Administration:

- Provides staff assistance to the Information Services Manager; prepares and presents reports and other necessary correspondence.
- Attends and participates in professional group meetings; stays abreast of new trends, innovations, equipment, and languages used in computer systems, information technology, word processing, spread sheets, databases, graphics, and desktop publishing.
- Assists in developing, planning, implementing and administering division goals, objectives, policies and procedures.
- Develops and manages disaster recovery plans and procedures.
- Develops justifications and recommendations for acquisition of computer hardware and software; prepares specifications for bid documents and evaluates proposals; reviews and evaluates contracts and proposals.
- Recommends the purchase of new supplies and equipment as necessary.
- Assists in the day-to-day operations of the City's technology needs; implements system upgrades; installs new and additional hardware and software as required; replaces, repairs,

upgrades, and maintains system hardware and software; monitors and recommends improvement to operational performance and security; troubleshoots system problems; isolates the cause of system failures; maintains operational efficiency and load balancing of the systems.

- Performs other duties as assigned.

QUALIFICATIONS

Knowledge of:

- Operational characteristics, services, and activities of information technology.
- Modern and complex principles and practices of computer systems management, analysis, design, programming, and maintenance.
- Design, operations, properties, and capabilities of networks and network cabling.
- Various software packages including word processing, spreadsheet, data processing, graphics and desktop publishing applications and programs.
- Principles of telecommunications, including basic telephone wiring and telephone configurations, database, data communication, and operating systems.
- Operation and care of computer equipment.
- Data processing management and general administration practices and techniques.
- Operating characteristics, capabilities, capacities, and limitations of computer related peripheral equipment.
- Data management theory, principles, and practices and their application to a wide variety of services and programs.
- Operating systems such as LAN/WAN and WLAN operating systems, mini-computer applications, and telephone systems.
- Standard Website and Web Application development languages.
- Principles of lead supervision and training.
- Applicable Federal, State and local laws, codes and regulations.
- Principles and procedures of record keeping and reporting.
- Research techniques, methods, and procedures.
- Occupational hazards and standard safety practices necessary in the area of computer operations.
- Technical report writing practices and procedures.
- Modern office practices, methods and computer equipment.
- Computer applications related to the work.
- English usage, grammar, spelling, vocabulary, and punctuation.
- Techniques for dealing effectively with the public, vendors, contractors and City staff, in person and over the telephone.
- Techniques for providing a high level of customer service to public and City staff, in person and over the telephone.

Ability to:

- Implement comprehensive computer and telecommunications operations-related projects and training programs.
- Perform difficult telecommunications and computer information system operation, installation, repair, and maintenance work involving the use of independent judgment and personal initiative.
- Administer websites and web-based applications.

- Analyze problems, identify alternative solutions, project consequences of proposed actions, and implement recommendations in support of goals.
- Interpret and apply the policies, procedures, laws, and regulations pertaining to assigned programs and functions.
- Configure, monitor and support network routing, packet switching and firewall equipment.
- Accurately evaluate and prioritize hardware and software requests.
- Research, develop, and recommend cost-effective technical system improvements.
- Prepare and maintain accurate and complete records.
- Prepare clear and concise reports.
- Respond to requests and inquiries from end-users.
- Exercise good judgment, flexibility, creativity, and sensitivity in response to changing situations and needs.
- Understand and follow oral and written instructions.
- Operate, install, maintain, configure, and troubleshoot a variety of highly technical computer equipment and peripherals.
- Operate modern office equipment including computer equipment and software programs.
- Organize own work, set priorities and meet critical time deadlines.
- Use English effectively to communicate in person, over the telephone and in writing.
- Use tact, initiative, prudence and independent judgment within general policy, procedural and legal guidelines.
- Establish and maintain effective working relationships with those contacted in the course of the work.

Education and Experience:

Any combination of training and experience that would provide the required knowledge, skills and abilities is qualifying. A typical way to obtain the required qualifications would be:

Equivalent to graduation from an accredited four-year college or university with major coursework in computer science, information technology, business administration, or a related field, and three (3) years of responsible computer systems, systems analysis, network management, or related experience.

License:

- Valid California class C driver's license with satisfactory driving record.

PHYSICAL DEMANDS

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; to operate a motor vehicle and to visit various City sites; vision to read printed materials and a computer screen; and hearing and speech to communicate in person, before groups and over the telephone. This is primarily a sedentary office classification although standing in work areas and walking between work areas may be required. Finger dexterity is needed to access, enter and retrieve data using a computer keyboard or calculator and to operate standard office equipment and computer systems hardware. Positions in this classification occasionally bend, stoop, kneel, reach, push and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects necessary to perform job functions.

ENVIRONMENTAL ELEMENTS

Employees work in an office environment with moderate noise levels, controlled temperature conditions and no direct exposure to hazardous physical substances. Employees may interact with upset

staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.

WORKING CONDITIONS

May be required to work on evenings, weekends and holidays.